

EXHIBIT D

Customer No. 33401

Attorney Docket No. 73785-013

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
C. Earl Woolfork

Serial No.: 10/648,012

Filed: August 26, 2003

For: WIRELESS DIGITAL AUDIO
MUSIC SYSTEM

Group Art Unit: 2644

Examiner: Andrew Graham

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office action mailed on December 30, 2005, please amend the above-identified application as indicated below.

Amendments to the specification begin on page 2 of this paper.

Amendments to the claims are reflected in the listing of claims which begins on page 3 of this paper.

Amendments to the drawings begin on page 12.

Remarks begin on page 13 of this paper.

LAS99 1446880-1.073785.0013

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Amendments to the Specification:

Please amend the specification as follows:

On page 6, line 10, (or paragraph [0009], line 12) please delete the following sentence:

"This digital signal has a throughput of approximately 1.4 Mbps that may be as low as approximately 1.0 Mbps."

On page 6, line 11, please delete the number "34" at the end of the sentence so that this sentence will read: "After digital conversion, the digital signal may be processed by a digital low pass filter."

At para. 0010, line 6, please delete the number "64" at the end of the sentence so that this sentence will read: "The transmitted signal from transmit antenna 24 may be received by receiving antenna 52 and communicated to a wideband bandpass filter (BPF)."

At paragraph [0016], line 1, please replace the first sentence with the following:

--The channel decoder 66 may be a Viterbi decoder. A channel decoder 66 may be in communication with the bandpass filter. --

At paragraph [0010], line 6, please add the following sentences at the beginning of this paragraph: --A digital signal may be received at antenna receiving antenna 52 and communicated to, e.g., a wideband bandpass filter. The received spread spectrum signal may then be communicated to a 2.4 GHz direct conversion receiver 56. A frequency shift keying (FSK) modulation/detection technique could be used given a frequency hopping spread spectrum (FHSS) system choice. The direct conversion receiver 56 may provide a means to convert the received signal while using timing and synchronization to capture the correct bit sequence embedded in the received spread spectrum signal. --

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Amendments to the Claims:

Please amend the claims as follows:

1. (Currently amended) A wireless digital audio music system for spread spectrum communication of an audio music signal from the analog headphone jack connected to a battery powered spread spectrum transmitter and received by a battery powered spread spectrum headphone receiver comprising:

an analog headphone jack from an analog audio music source in communication with a battery powered digital transmitter;

said battery powered digital transmitter converts an analog audio music signal from said existing analog headphone jack to a digital signal using an ADC in communication with an encoder [at a signal rate of less than approximately 1.0 Mbps];

said encoder in communication with a channel encoder;

said channel encoder in communication with [a digital low pass filter;

said digital low pass filter in communication with] a digital modulator;

said digital modulator in communication with a spread spectrum communication modulator that utilizes a code generator to create [user code] a unique hop pattern for each individual user;

said spread spectrum communication modulator in communication with a transmit antenna that transmits at a radio frequency of approximately 2.4 GHz for receipt by a receiving antenna;

said receiving antenna in communication with a spread spectrum communication demodulator;

said spread spectrum communication demodulator in communication with a receiver code generator and with a digital demodulator;

said digital demodulator in communication with [a wide bandpass filter;

said wide bandpass filter in communication with] a channel decoder;

said channel decoder in communication with a receiver decoder;

said receiver decoder in communication with a DAC;

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said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20 kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

2. (Canceled).

3. (Canceled).

4. (Currently amended) A method for battery powered wireless communication transmission and reception of high fidelity audio music between a battery operated digital transmitter and a battery operated digital receiver headphone comprising the steps of:

connecting the plug attached to said battery operated digital transmitter to the existing analog headphone jack of an audio music source;

converting a music audio signal to a digital communication signal using an ADC in communication with an encoder;

encoding the communication signal using channel encoding;

[digital low pass filtering the communication signal;]

modulating the digital communication signal using a digital modulator;

creating a spread spectrum signal using a code generator to modulate a [unique user code] unique hop pattern for each individual user;

transmitting said spread spectrum signal at a radio frequency of approximately 2.4 GHz [at a power level for reception at a distance up to approximately 10 feet from said battery operated transmitter];

receiving said spread spectrum signal at said battery operated receiver headphones;

demodulating said spread spectrum signal;

demodulating said digital communication signal;

[bandpass filtering said digital communication signal;]

channel decoding of said digital communication signal;

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converting said digital communication signal back to said analog music audio signal using a decoder in communication with a DAC; and

[communication] communicating said analog music audio signal to a headphone speaker within the headphone receiver.

5. (Canceled)

6. (Currently amended) An audio music digital wireless transmitter for spread spectrum communication of an audio music signal [from an analog headphone jack connected to a battery powered spread spectrum transmitter], comprising:

an analog headphone jack from an audio music source in communication with a battery powered digital transmitter;

said battery powered digital transmitter [converts] being configured to convert an analog audio music signal from said existing analog headphone jack to a digital signal using an ADC in communication with an encoder [at a signal rate of less than approximately 1.0 Mbps];

said encoder in communication with a channel encoder;

said channel encoder in communication with [a digital low pass filter;

said digital low pass filter in communication with] a digital modulator;

said digital modulator in communication with a spread spectrum communication modulator that utilizes a code generator to create [user code] a unique hop pattern for each individual user; and

said spread spectrum communication modulator in communication with a transmit antenna that transmits at a radio frequency of approximately 2.4 GHz for receipt by a receiving antenna.

7. (Currently amended) An audio music digital wireless receiver for spread spectrum communication of an audio music signal [to be received by a battery powered spread spectrum receiver], comprising:

a receiving antenna in communication with a spread spectrum communication demodulator;

said spread spectrum communication demodulator in communication with a code generator configured to create a unique hop pattern for each individual user;

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said digital demodulator in communication with [a wide bandpass filter;
said wide bandpass filter in communication with] a channel decoder;
said channel decoder in communication with a decoder;
said decoder in communication with a DAC;
said DAC in communication with a low pass filter to pass the analog music signal
in the approximate frequency band of 20 Hz to 20kHz; and

said low pass filter passing analog music signal will be amplified for processing
to a speaker headphone set to provide high quality music for listening by a single user
wearing the headphones.

8. (New) A wireless digital audio music system for spread spectrum
communication of an audio music signal from the analog headphone jack connected to a
battery powered spread spectrum transmitter and received by a battery powered spread
spectrum headphone receiver comprising:

an analog headphone jack from an audio music source in communication with a
battery powered digital transmitter;

said battery powered digital transmitter converts an analog audio music signal
from said existing analog headphone jack to a digital signal using an ADC in
communication with an encoder;

said encoder in communication with a channel encoder;

said channel encoder in communication with a digital modulator;

said digital modulator in communication with a spread spectrum communication
modulator that utilizes a code generator to create a unique hop pattern for each individual
user;

said spread spectrum communication modulator in communication with a transmit
antenna that transmits at a radio frequency of approximately 2.4 GHz for receipt by a
receiving antenna;

said receiving antenna in communication with a spread spectrum communication
demodulator;

said spread spectrum communication demodulator in communication with a
receiver code generator and with a digital demodulator;

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said digital demodulator in communication with a channel decoder that is configured to perform soft-decision decoding;

said channel decoder in communication with a receiver decoder;

said receiver decoder in communication with a DAC;

said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20 kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

9. (New) An audio music digital wireless receiver for spread spectrum communication of an audio music signal, comprising:

a receiving antenna in communication with a spread spectrum communication demodulator;

said spread spectrum communication demodulator in communication with a code generator configured to create a unique hop pattern for each individual user;

said digital demodulator in communication with a channel decoder that is configured to perform soft-decision decoding;

said channel decoder in communication with a decoder;

said decoder in communication with a DAC;

said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

10. (New) A wireless digital audio music system for spread spectrum communication of an audio music signal from the analog headphone jack connected to a battery powered spread spectrum transmitter and received by a battery powered spread spectrum headphone receiver comprising:

an analog headphone jack from an audio music source in communication with a battery powered digital transmitter;

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said battery powered digital transmitter converts an analog audio music signal from said existing analog headphone jack to a digital signal using an ADC in communication with an encoder;

said encoder in communication with a channel encoder that is configured to send encoded symbols that are compatible with a Viterbi decoder;

said channel encoder in communication with a digital modulator;

said digital modulator in communication with a spread spectrum communication modulator that utilizes a code generator to create a unique hop pattern for each individual user;

said spread spectrum communication modulator in communication with a transmit antenna that transmits at a radio frequency of approximately 2.4 GHz for receipt by a receiving antenna;

said receiving antenna in communication with a spread spectrum communication demodulator;

said spread spectrum communication demodulator in communication with a receiver code generator and with a digital demodulator;

said digital demodulator in communication with a Viterbi decoder;

said Viterbi decoder in communication with a receiver decoder;

said receiver decoder in communication with a DAC;

said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20 kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

11. (New) An audio music digital wireless receiver for spread spectrum communication of an audio music signal to be received by a battery powered spread spectrum headphone receiver comprising:

a receiving antenna in communication with a spread spectrum communication demodulator;

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said spread spectrum communication demodulator in communication with a code generator configured to create a unique hop pattern for each individual user;
said digital demodulator in communication with a Viterbi decoder;
said Viterbi decoder in communication with a decoder;
said decoder in communication with a DAC;
said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20kHz; and
said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

12. (New) A wireless digital audio music system for spread spectrum communication of an audio music signal from the analog headphone jack connected to a battery powered spread spectrum transmitter and received by a battery powered spread spectrum headphone receiver comprising:

an analog headphone jack from an audio music source in communication with a battery powered digital transmitter;

said battery powered digital transmitter converts an audio music signal from said existing analog headphone jack to a digital signal using an ADC in communication with an encoder;

said encoder in communication with a channel encoder;

said channel encoder in communication with a digital modulator;

said digital modulator in communication with a spread spectrum communication modulator that utilizes a code generator to create a unique hop pattern for an individual user;

said spread spectrum communication modulator in communication with a transmit antenna that transmits at a radio frequency of approximately 2.4 GHz for receipt by a receiving antenna;

said receiving antenna in communication with a spread spectrum communication demodulator;

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a 2.4 GHz direct conversion receiver that includes a spread spectrum communication demodulator and a receiver code generator;

said spread spectrum communication demodulator in communication with said receiver code generator and with a digital demodulator;

said digital demodulator in communication with a channel decoder;

said channel decoder in communication with a receiver decoder;

said receiver decoder in communication with a DAC;

said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20 kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

13. (New) An audio music digital wireless receiver for spread spectrum communication of an audio music signal, comprising:

a receiving antenna in communication with a 2.4 GHz direct conversion receiver, wherein the direct conversion receiver includes a spread spectrum communication demodulator in communication with a code generator, said code generator being configured to create a unique hop pattern for each individual user;

said digital demodulator in communication with a channel decoder;

said channel decoder in communication with a decoder;

said decoder in communication with a DAC;

said DAC in communication with a low pass filter to pass the analog music signal in the approximate frequency band of 20 Hz to 20kHz; and

said low pass filter passing analog music signal will be amplified for processing to a speaker headphone set to provide high quality music for listening by a single user wearing the headphones.

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Amendments to the Drawings:

The drawings were objected to as incorporating new matter because of the altered order of the filter in relation to other elements. Corrected drawings were required because of the altered order of the filter in Figs. 2 and 3. More particularly, with respect to Fig. 2, the low pass filter was shown between the ADC and encoder, thus differing from the drawings in the parent application. With respect to Fig. 3, the bandpass filter was shown in a different order from that shown in the parent.

In order to expedite matters, Applicant has deleted the low pass filter of Fig. 2 as well as the bandpass filter of Fig. 3. These filters are often included with analog-to-digital converters and demodulators such as those shown in Figs. 2 and 3.

Moreover, Applicant has specified in Fig. 3 that the channel decoder 66 is a Viterbi channel decoder. Also in Fig. 3, Applicant has specified that the receiver is a direct conversion receiver. Each of these elements was originally found in Applicant's parent specification.

ATTACHMENTS: 1 ANNOTATED SHEET AND 2 REPLACEMENT SHEETS

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REMARKS

Applicant would like to thank Examiner Xu Mei and Examiner Andrew Graham for discussing the claims on January 26, 2006 at 2:00 p.m. EST.

Claims 1, 4, 6 and 7 remain pending in this application. These claims have been amended to further clarify the scope of the invention for the reasons set forth below. Moreover, new Claims 8-13 have been added with additional limitations discussed in the Examiner interview.

Rejection under 35 USC 132-New Matter

The specification was objected to under 35 USC 132 as allegedly incorporating new matter. More particularly, the specification was objected to based on a throughput rate "that may be as low as approximately 1.0 Mbps." Applicant's disclosure provided that the throughput may be approximately 1.4 Mbps. Accordingly, Applicant submits that the phrase objected to was not new matter. However, in order to further expedite prosecution, Applicant has deleted this language from the specification. Accordingly, Applicant requests that this objection be withdrawn.

Rejection under 35 USC 112, 1st paragraph

Claims 1 and 6 stand rejected under 35 USC 112, 1st paragraph, as allegedly failing to comply with the written description requirement. More particularly, the office action provided that the limitation "an ADC in communication with an encoder at a signal rate of less than approximately 1.0 Mbps" incorporated new matter because there was no support for this throughput rate between the ADC and encoder. Applicant has

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amended the cited claims to read -- an ADC in communication with an encoder--, deleting the reference to the signal rate. Accordingly, Applicant submits that this rejection has been overcome.

Rejections under 35 USC 103

Claims 1, 4, 6 and 7 were rejected under 35 USC 103 as allegedly being unpatentable over Alstatt (USPN 5771441) in view of Schotz et al (USPN 5946343) and further in view of Schotz (USPN 5491839).

Applicant respectfully submits that a *prima facie* case of obviousness has not been made since the references do not teach or suggest all claim limitations. Claims 1, 4 and 6 require a code generator that generates or modulates a "user code" that creates a unique hop pattern for each individual user. The present invention uses frequency hopping spread spectrum (FHSS) transmission technology with a unique pseudo-noise (PN) code that is long enough, and that has low cross-correlation properties so that the hop pattern is unique for each individual user. FHSS employs a data signal that is modulated with a narrowband carrier signal that "hops" in a random but predictable sequence from frequency to frequency as a function of time over a wide band of frequencies. The signal energy is spread in the time domain--as opposed to severing each bit into small pieces in the frequency domain. The FHSS technique reduces interference because a signal from a narrowband system may only affect the spread spectrum signal if both are transmitting at the same frequency at the same time. If synchronized properly, a single logical channel is maintained. With FHSS, the transmission frequencies are determined by the PN code. The receiver is set to the same hopping code and listens to the incoming signal at the right time and correct frequency.

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By contrast, Schotz uses "one of four different PN sequences." (See Schotz '343 at Col. 16:61 to Col. 17:2) These codes are assigned to specific devices for a single household--not individual users. As such, the Schotz code may be properly deemed a "device code" as opposed to a "user code" as in the present invention. There is no mention in Schotz that the PN code must support individual users operating within the same space. By contrast, the present invention addresses the interference between individual users [parent specification/page4/lines16-22] and each PN code and its hopping sequence is generated to address the needs of individual users. (See e.g., paras. 0009 and 0011 of the present disclosure.)

While Applicant submits that the references did not teach or suggest all claim limitations as presented, Applicant has amended Claims 1, 4 and 6 to recite "a code generator" that creates "a unique hop pattern for each individual user." This amendment is made to further clarify the scope of the invention. Moreover, this limitation has been added to Claim 7, and all new Claims 8-13 further include this limitation. Accordingly, Applicant submits that the claims clearly state that this code generator is used to create a unique hop pattern for each individual user, a limitation not taught or suggested by the prior art references. Accordingly, Applicant respectfully submits that this rejection has been overcome.

Moreover, a *prima facie* case of obviousness was not made because the references do not teach or suggest the limitation directed to an analog battery-powered digital transmitter. The office action provides that the combination of Alstatt and Schotz's '343 Patent teaches a battery powered digital transmitter. Applicant respectfully submits that a *prima facie* case of obviousness has not been made. More particularly, the combination

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of the battery-powered analog transmitter of Alstatt and the wall-powered digital transmitter of Schotz '343 would render Alstatt unsatisfactory for its intended purpose. Alstatt would suffer from a significantly reduced play time due to the power consumption of Schotz's numerous integrated circuits. Moreover, the Alstatt headphones for his portable device would be rendered too large because of the size of the integrated circuits used in Schotz.

For the same reasons of reduced play time and unwieldy headphones, the combination of Alstatt and Schotz would not provide a reasonable expectation of success. Accordingly, Applicant respectfully submits that a *prima facie* case of obviousness has not been made in this respect as well.

New limitations have been added to the new Claims 8-13, as discussed in Applicant's Examiner interview. New Claims 8 and 9 have been added to recite a channel decoder that permits soft-decision decoding. New Claims 10-11 have been added to recite a channel decoder that is a Viterbi decoder. (For further clarification, Claim 10, directed to the system, includes a limitation that the channel encoder is configured to send encoded symbols that are compatible with a Viterbi decoder). The specification has also been amended to recite that the channel decoder may be a Viterbi decoder. This material was present in the parent application to which the present application claims priority. [See page 4, line 27 of the parent application]

The Viterbi decoder--or a channel decoder that permits soft-decision decoding--is not taught or suggested by the prior art references. Schotz incorporates a 1/2 rate extended Golay block coding scheme. (Col. 9:19-26) Schotz's block coding scheme differs significantly from the coding scheme of the present claims. More particularly,

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soft-decision coding may be used to prevent a greater band of interference than the Golay block coding scheme.

While the Viterbi channel encoding/decoding scheme permits hard decision coding as found in Schotz, it is the ability of this Viterbi scheme to further permit soft-decision coding that permits the Viterbi scheme to suppress a broader range of interference from other users. The Viterbi channel encoding/decoding scheme prevents interference (or jamming) from other system users. This interference can be represented as follower (or repeater) interference.

The follower (or repeater) jammer transmits frequency-hopped narrowband interference using the same hop sequence as the communicator, where the communicator is the primary user. This is equivalent to at least one additional system user in operation within the same space (or range) of a primary user. The follower (or repeater) jammers' output—resulting from use by other system users—must arrive at the primary user's frequency-hopping receiver hop frequency band space and dwell there long enough to cause interference before hopping to the next hop frequency band. The partial band jammer that is referenced in Schotz's design is defined as a transmitter (non-hopping type) that transmits its available power into a limited bandwidth which is smaller than the spread spectrum bandwidth. (See Schotz '343, para. 0016, lines 1-5)

Contrary to hard-decision decoding, soft-decision decoding includes additional information symbols to determining the reliability of the symbols being decoded. Included in the additional information symbols of the present invention is jammer state information (JSI). JSI includes information regarding the potential jamming threat, including the hop rate, dwell time, bandwidth, and so on, that would cause interference in

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the system of the present disclosure. The JSI permits the receiver headphones to know if other system users are in the area, and if so, then the Viterbi decoder assigns less weight to the symbols that may be jammed so that it makes the a better estimate of the transmitted code sequence.

The Schotz design uses hard-decision decoding (see e.g., reference SRT241203) that does not incorporate JSI, as required with soft-decision decoding. In addition, Schotz states that forward error correction (see e.g., SRT241203) can be eliminated by frequency hopping is used in his design. (See Schotz para. 0016, lines 5-10)

Repeater jamming interference occurs when other system users are within relatively close range to one another. In accordance with the present invention, a repeater jammer transmits frequency-hopped narrow band interference using the same hop rate and dwell time as the primary user. This is the case for one or more other system users, because the same hop rate and dwell time is used for all system users, but each has a different PN code sequence. So, the repeater jammer (represented by other system users) may transmit an interference signal that may hop along with the primary system user to create interference in the receiver headphones of the primary system user. Schotz does not suppress this type of interference.

Schotz provides states that his system adds "control information" so there is no "need for independent stereos" in the same space. (See Schotz Abstract). Accordingly, Schotz does not design his system to function with multiple users (i.e., multiple stereos) in the same space. In fact, he teaches away from the use of independent stereos.

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Schotz states the forward error correction is not needed (See Schotz at Column16:1-10). Further, the hard-decision decoder Schotz uses does not apply additional confidence symbols (like JSI) to maximize accurate decoding.

New Claims 12 and 13 have also been added to recite a 2.4 GHz direct conversion receiver. These receivers are compatible with systems incorporating frequency hopping spread spectrum (FHSS) transmission technology. Applicant respectfully submits that the prior art does not teach or suggest a direct conversion receiver. Schotz '343 incorporates a superheterodyne receiver that uses quadrature phase-shift keying as a modulation technique. This superheterodyne receiver incorporates filtering, oscillator and frequency synthesis components that are not needed when a direct conversion receiver is used. Moreover, at the time of Applicant's invention, the QPSK modulation technique was not compatible with modulation using frequency shift keying (FSK), so Schotz does not suggest a direct conversion receiver.

Clarifying Amendments

Minor amendments have further been made to the claims in order to correct typographical errors. More particularly, Claim 4 has been amended to recite that the method comprises the steps of various elements, with steps being plural instead of singular. Claim 4 has also been amended to recite, as part of the method "*communicating*" said analog music signal instead of "communication". Further, Claim 4 has been amended to delete reference to a distance of reception. The preambles of Claims 6 and 7 have been amended to delete reference, respectively, to "an analog headphone jack connected to a battery powered spread spectrum transmitter" and "to be

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received by a battery powered spread spectrum headphone receiver." A semicolon has been added after the first element of Claim 7 directed to "a receiving antenna in communication with a spread spectrum headphone receiver."

Claim 6 has also been amended to recite that the battery powered digital transmitter is *configured to convert* an analog audio music signal, as opposed to "converts" an analog audio music signal.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance. A notice of allowance is respectfully requested.

While Applicant does not believe any fees are necessary since this response is submitted within the two-month window after the December 30, 2005 office action. However, if any such fees are deemed necessary, please charge any additional fees which may be required, or credit overpayment to Deposit Account No. 50-1946, referencing number 073785-0013.

Respectfully submitted,

March 14, 2006

Date

Daphne L. Burton

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ANNOTATED SHEET

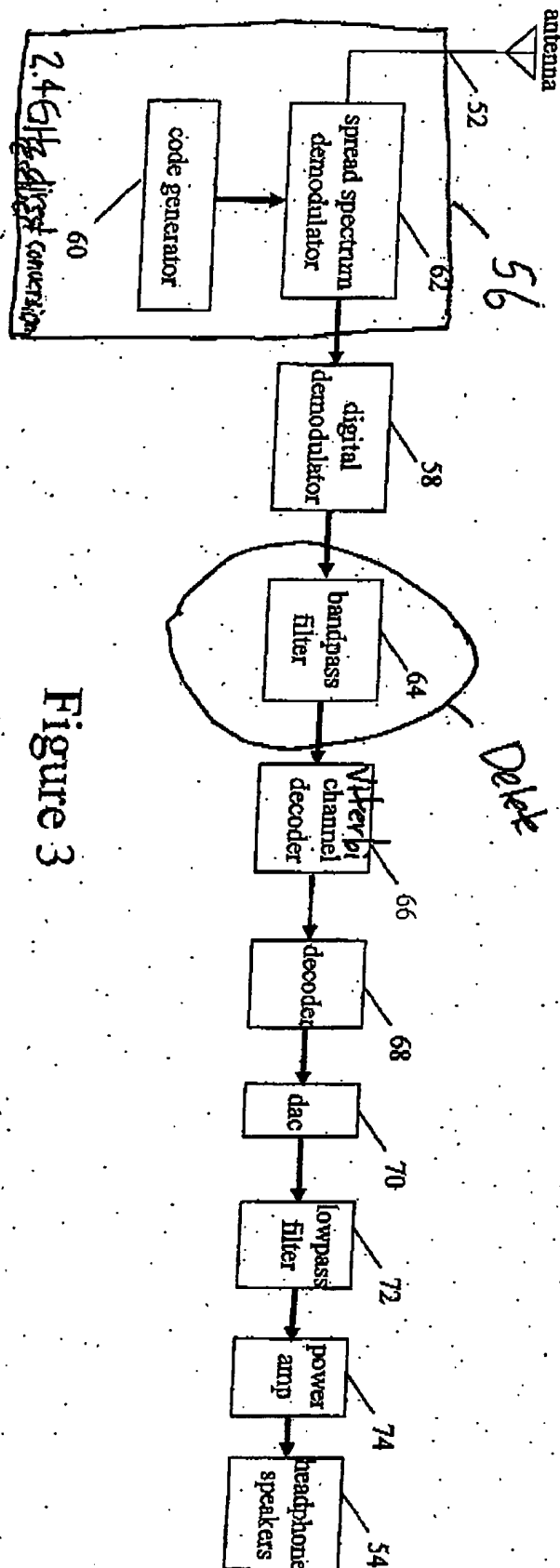


Figure 2

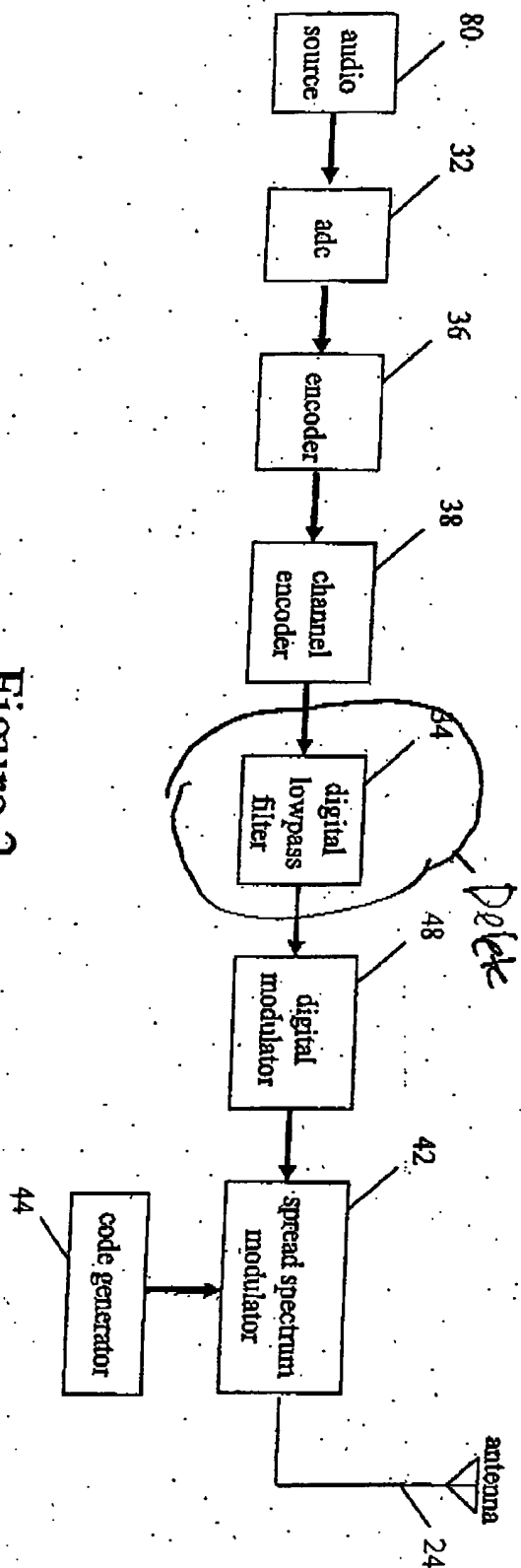
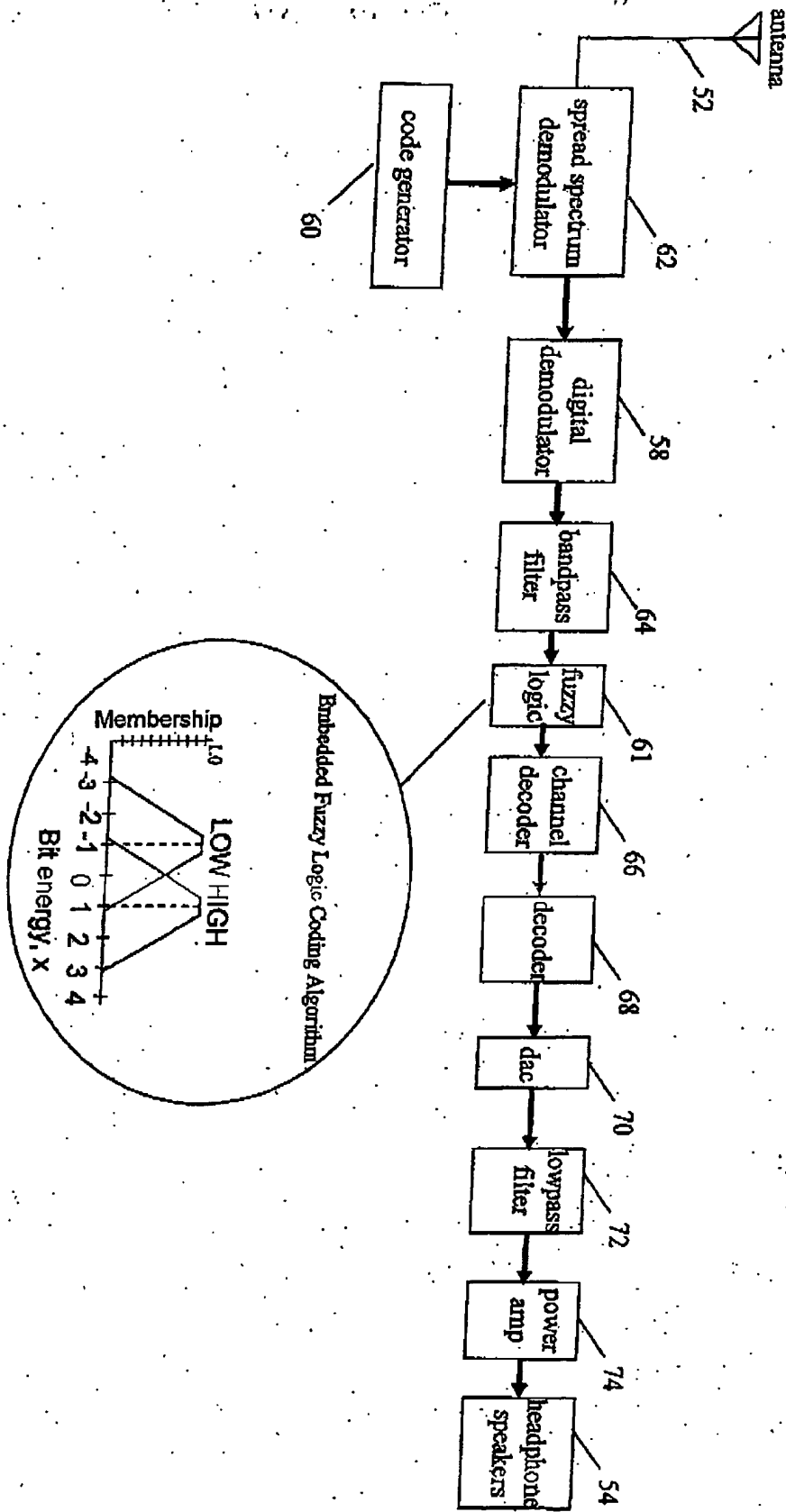


Figure 3

ANNOTATED SHEET

Figure 4



REPLACEMENT SHEET

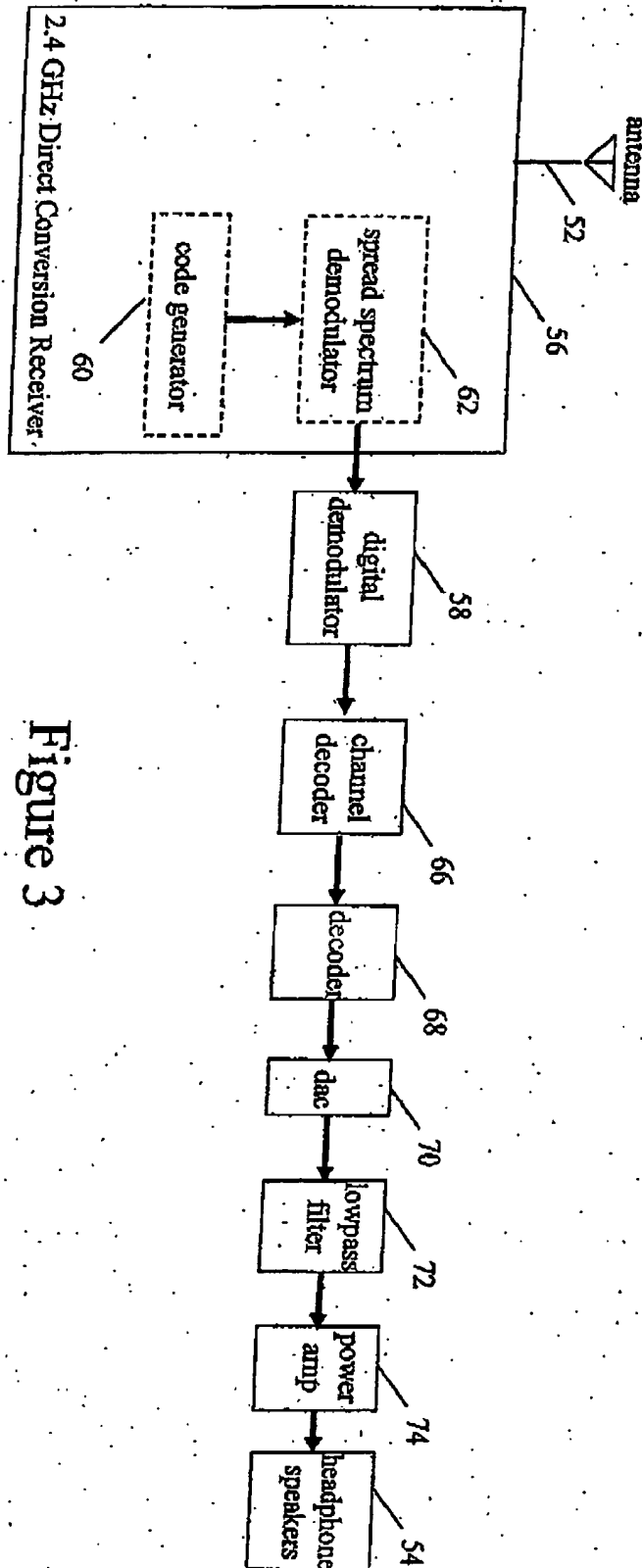
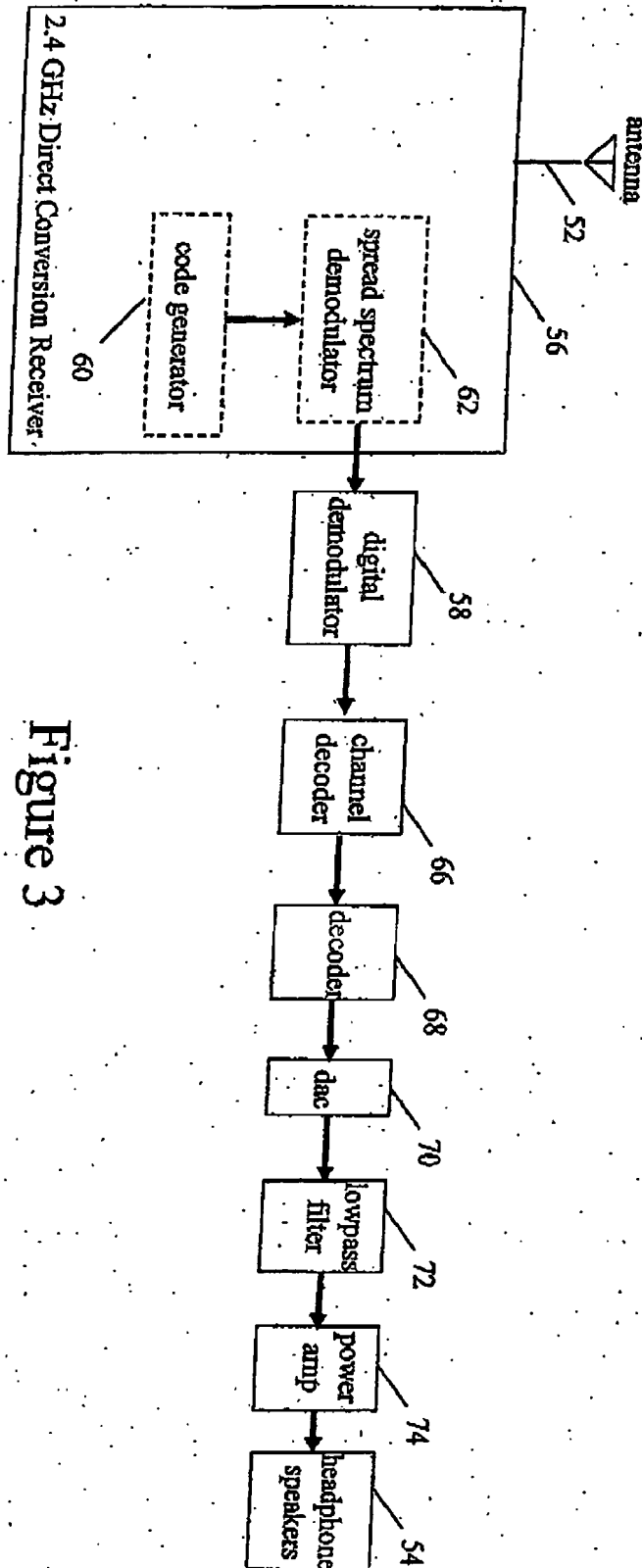


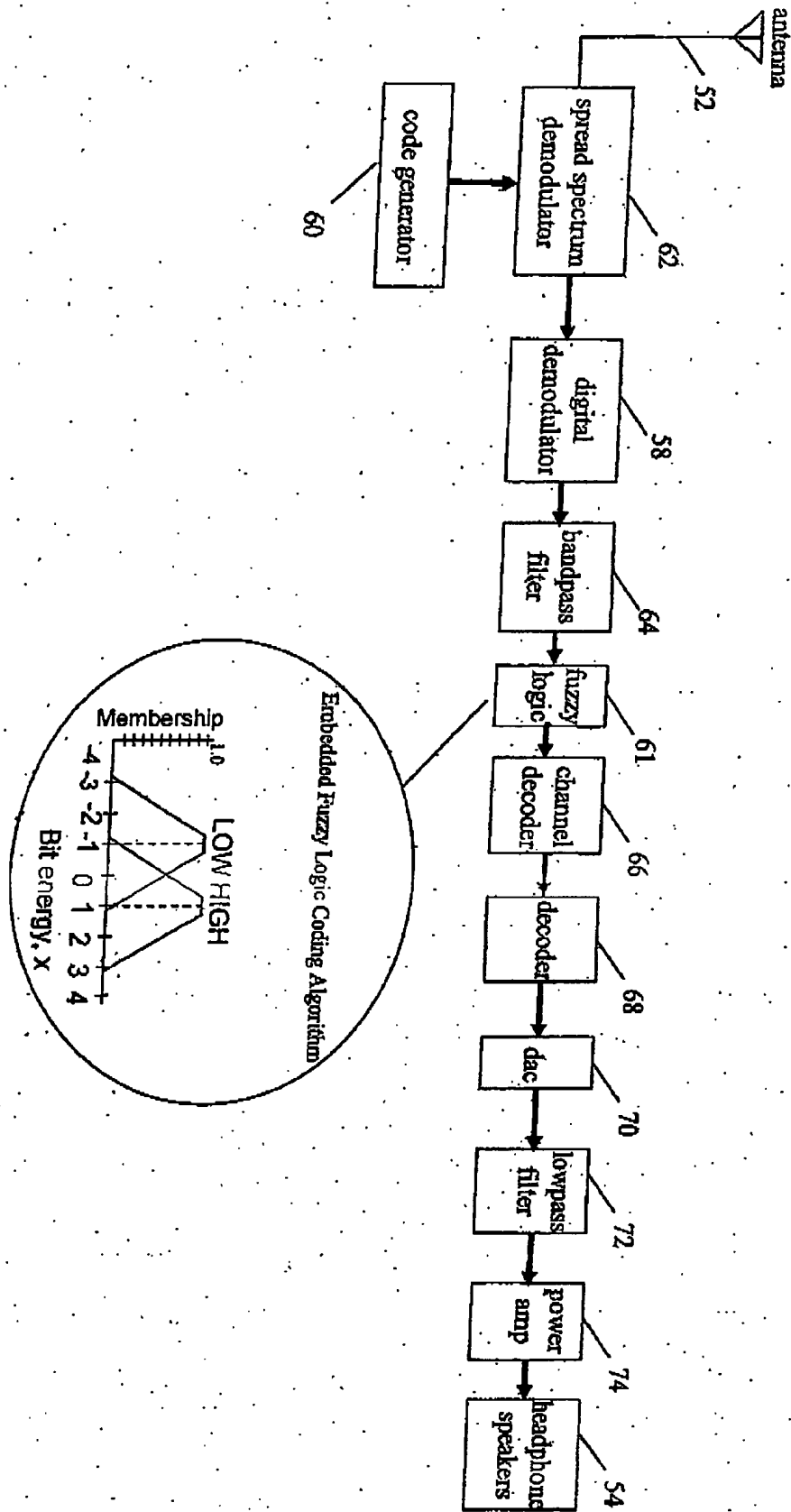
Figure 2

Figure 3



REPLACEMENT SHEET

Figure 4



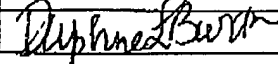
RECEIVED
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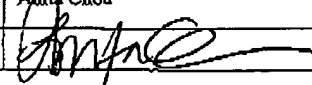
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REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL	
<small>Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provided for continued examination of an utility or plant application filed on or after June 8, 1995. See the American Inventors Protection Act of 1999 (AIPA).</small>	
Application Number	10/648,012
Filing Date	August 26, 2003
First Named Inventor	C. Earl Woolfork
Group Art Unit	2644
Examiner Name	A. Graham
Attorney Docket Number	73785-013

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application
NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53 (4) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Interim Rule, 65 Fed. Reg. 14863 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. Submission required under 37 C.F.R. § 1.114	
a. <input type="checkbox"/> Previously submitted	
i. <input type="checkbox"/> Consider the amendments/reply under 37 C.F.R. § 1.116 previously filed on:	
ii. <input type="checkbox"/> Consider the arguments in the Appeal Brief or Reply Brief previously filed on	
iii. <input type="checkbox"/> Other	
b. <input checked="" type="checkbox"/> Enclosed	
i. <input checked="" type="checkbox"/> Amendment/Reply as filed on March 13, 2006 (previously submitted on February 16, 2005)	
ii. <input type="checkbox"/> Affidavit(s)/Declaration(s)	
iii. <input type="checkbox"/> Information Disclosure Statement (IDS)	
iv. <input type="checkbox"/> Other	
2. Miscellaneous	
a. <input type="checkbox"/> Suspension of action of the above-identified application is requested under 37 C.F.R. § 1.1.03(c) for a period of ____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(i) required)	
b. <input type="checkbox"/> Other	
3. Fees The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.	
a. <input checked="" type="checkbox"/> The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 50-1946	
i. <input checked="" type="checkbox"/> RCE fee required under 37 C.F.R. § 1.17(e) \$395.00	
ii. <input type="checkbox"/> Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)	
iii. <input type="checkbox"/> Other	
b. <input type="checkbox"/> Check in the amount of \$____ enclosed	
c. <input type="checkbox"/> Payment by credit card (Form PTO-2038 enclosed)	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED			
Name (Print/Type)	Daphne L. Burton	Registration No. (Attorney/Agent)	45,323
Signature		Date	March 14, 2006

CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 C.F.R. § 1.6(d)			
I hereby certify that this correspondence is being transmitted via facsimile to 571-273-8300 under 37 CFR 1.6(d) to Mail Stop: RCE on the date below.			
Name (Print/Type)	Ami Chou	Date	March 14, 2006
Signature			

LAS99 1446854-1.073785.0013

PATENT APPLICATION FEE DETERMINATION RECORD
 Effective January 1, 2003

Application or Docket Number

10/645012

CLAIMS AS FILED - PART I

(Column 1) (Column 2)

TOTAL CLAIMS	5	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	5 minus 20 =	0
INDEPENDENT CLAIMS	2 minus 3 =	0
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

(Column 1) (Column 2) (Column 3)

AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total	5	20
	Independent	3	3
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>		

SMALL ENTITY TYPE ☐ OR

OTHER THAN SMALL ENTITY

RATE	FEE	RATE	FEE
BASIC FEE	375.00	BASIC FEE	750.00
X\$ 9=		X\$18=	
X42=		X84=	
+140=		+280=	
TOTAL	375	TOTAL	

SMALL ENTITY OR

OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		X\$18=	
X42=		X84=	
+140=		+280=	
TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total	10	20
	Independent	10	4
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>		

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		X\$18=	
X42=	6.00	X84=	
+140=		+280=	
TOTAL ADDIT. FEE	6.00	TOTAL ADDIT. FEE	

AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total	10	20
	Independent	10	10
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>		

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		X\$18=	
X42=		X84=	
+140=		+280=	
TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

- * If the entry in column 1 is less than the entry in column 2, enter "0" in column 3.
- * If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
- * If the "Highest Number Previously Paid For" IN THIS SPACE is less than 5, enter "5".
- * The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

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